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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,736	01/09/2007	Joachim Lohr	L7725.06116	5985

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EXAMINER	
PATEL, CHANDRAHAS B	
ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/586,736	LOHR ET AL.	
	Examiner	Art Unit	
	Chandrahas Patel	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 August 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *24-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/8/2008 have been fully considered but they are not persuasive. Applicant argues that Padovani does not teach synchronous transmission of data packet to the mobile station. However, examiner disagrees. Padovani teaches scheduling on the forwarding link to the mobile station. This is determining at which times the packets should be transmitted which performs the task of synchronized communication. Applicant further argues that Padovani does not teach the common control message restricts the transmission format by setting a maximum uplink resource common to the plurality of mobile stations for uplink transmission. However, examiner disagrees. Padovani teaches based on present C/I ratio maximum data rate for the mobile stations is determined. The different data rates are given in table I and are selected according to the value of Rate index.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 24-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang et al. (US-PGPUB 2002/0168945) in view of Padovani et al. (USPN 7,079,550).

Regarding claim 24, Hwang teaches a method for controlling data transmissions in the uplink of telecommunication system, wherein a automatic repeat request (ARQ) protocol is used with synchronous retransmissions from to a base station via an uplink data channel is used **[Page 7, Para 85]**, and wherein the base station performs: receiving a data packet from the mobile station **[Fig. 2, 111]**, determining whether the data packet has been successfully decoded **[Fig. 2,**

120], if it has been determined that the data packet has not been successfully decoded **[Fig. 2, 120]**, transmitting a feedback message to the mobile station **[Fig. 2, 126]**.

However, Hwang does not teach the feedback message triggers a synchronous transmission of a retransmission data packet for the received data packet from the mobile station, scheduling uplink data transmissions of a plurality of mobile stations by transmitting a common control message to the plurality of mobile stations, wherein the common control message restricts the transmission format combination subset of each of the plurality of mobile stations to thereby set a maximum uplink resource common to the plurality of mobile stations that each of the plurality of mobile stations is allowed to utilize for uplink transmission on the uplink data channel.

Hwang teaches in the background of the related art a UMTS system and using HARQ protocol **[Page 1, Para 2, 16]**. Padovani teaches synchronous transmission of a retransmission data packet for the received data packet from the mobile station **[Col. 10, lines 27-39]**, scheduling uplink data transmissions of a plurality of mobile stations by transmitting a common control message to the plurality of mobile stations, wherein the common control message restricts the transmission format combination subset of each of the plurality of mobile stations to thereby set a maximum uplink resource common to the plurality of mobile stations that each of the plurality of mobile stations is allowed to utilize for uplink transmission on the uplink data channel **[Col. 20, lines 44-67, Col. 21, lines 23-31, signal to interference ratio determines the maximum uplink data rate, Table 1 shows the different limits for the data rates that can be supported]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a UMTS system and HARQ protocol so that multi-media capabilities can be provided, synchronously retransmit packets so that maximum data throughput can be achieved **[Col. 10, lines 27-39]** and to determine maximum uplink resource for the plurality of base stations since signal to interference ratio varies in the system which affects amongst other things data rate **[Col. 20, lines 44-67]**.

Regarding claims 25, 29, 33, 37, Hwang further teaches the feedback messages, indicating the successful or the unsuccessful reception of a data packet, are transmitted via a control channel **[Page 4, Para 46]**.

Regarding claims 26, 34, 38, Hwang further teaches the information in the feedback messages is sent simultaneously with scheduling related control information **[Page 4, Para 46]**.

Regarding claims 27, 31, 35, 39, Hwang further teaches the feedback messages and scheduling related control signaling is sent on the same channelization code **[Page 4, Para 46]**.

Regarding claim 28, Hwang teaches a base station for controlling uplink data transmission in the uplink of a telecommunication system, in which a automatic repeat request (ARQ) protocol is used with synchronous retransmissions from to a mobile station to a base station via an uplink data channel **[Page 7, Para 85]**, the base station comprising: a receiver operable to receive a data packet from the mobile station **[Fig. 2, 111]**, a determining unit operable to determine whether the data packet has been successfully decoded **[Fig. 2, 120]**, a transmitter operable to transmit a feedback message to the mobile station **[Fig. 2, 126]**, if it has been determined that the data packet has not been successfully decoded **[Fig. 2, 126]**.

However, Hwang does not teach the feedback message triggers a synchronous transmission of a retransmission data packet from the mobile station, a scheduler operable to schedule data transmissions of a plurality of mobile stations by transmitting a common control message to the plurality of mobile stations wherein the common control message restricts the transmission format combination subset of each of the plurality of mobile stations to determine a maximum uplink resource common to the plurality of mobile stations that each of the plurality of mobile stations is allowed to utilize for uplink transmission on the uplink data channel.

Hwang teaches in the background of the related art a UMTS system and using HARQ protocol **[Page 1, Para 2, 16]**. Padovani teaches synchronous transmission of a retransmission data packet for the received data packet from the mobile station **[Col. 10, lines 27-39]**, scheduling uplink data transmissions of a plurality of mobile stations by transmitting a common control message to the plurality of mobile stations wherein the common control message restricts the transmission format combination subset of each of the plurality of mobile stations to determine a maximum uplink resource common to the plurality of mobile stations that each of the plurality of mobile stations is allowed to utilize for uplink transmission on the uplink data channel **[Col. 20, lines 44-67, Col. 21, lines 23-31, signal to interference ratio determines the maximum uplink data rate, Table 1 shows the different limits for the data rates that can be supported]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a UMTS system and HARQ protocol so that multi-media capabilities can be provided, synchronously retransmit packets so that maximum data throughput can be achieved **[Col. 10, lines 27-39]** and to determine maximum uplink resource for the plurality of base

stations since signal to interference ratio varies in the system which affects amongst other things data rate **[Col. 20, lines 44-67]**.

Regarding claim 30, Hwang further teaches the information in said feedback messages is combined with scheduling related control information and is jointly encoded **[Page 4, Paragraph 46]**.

Regarding claim 32, Hwang teaches a method for controlling uplink data transmissions in the uplink of a telecommunications system in which a automatic repeat request (ARQ) protocol is used with synchronous retransmissions from a mobile station to a base station via a data channel **[Page 7, Para 85]**, and wherein the mobile station performs: transmitting a data packet to the base station via the uplink data channel **[Page 3, Para 40]**, receiving a feedback message from the base station and a common control message **[Page 3, Para 40]**, retransmitting the data packet to the base station after a fixed time span upon having received the feedback message **[Page 6, Para 75]**, and restricting the transmission format combination subset of the mobile terminal to thereby set a maximum uplink resource according to the common control message **[Page 6, Para 75, last 3 bits on NAK message indicate uplink resources, i.e. transmission power increase/decrease, multicode number increase/decrease]**.

Hwang does not teach synchronously retransmitting a data packet.

Hwang teaches in the background of the related art a UMTS system and using HARQ protocol **[Page 1, Para 2, 16]**. Padovani teaches synchronously retransmitting a data packet **[Col. 10, lines 27-39]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a UMTS system and HARQ protocol so that multi-media capabilities can be

provided and to synchronously retransmit packets so that maximum data throughput can be achieved **[Col. 10, lines 27-39]**.

Regarding claim 36, Hwang teaches a mobile terminal for use in a telecommunications system in which a automatic repeat request (ARQ) protocol is used with synchronous retransmissions from a mobile station to a base station via an uplink data channel **[Page 7, Para 85]**, the mobile station comprising: a transmitter to transmit a data packet to the base station via the uplink data channel **[Page 3, Para 40]**, a receiver operable to receive a feedback message from the base station and a common control message **[Page 3, Para 40]**, wherein the transmitter is operable to retransmit the data packet to the base station after a fixed time span upon having received the feedback message **[Page 6, Para 75]**, and restricting the transmission format combination subset of the mobile terminal to thereby set a maximum uplink resource according to the common control message **[Page 6, Para 75, last 3 bits on NAK message indicate uplink resources, i.e. transmission power increase/decrease, multicode number increase/decrease]**.

Hwang does not teach synchronously retransmitting a data packet.

Hwang teaches in the background of the related art a UMTS system and using HARQ protocol **[Page 1, Para 2, 16]**. Padovani teaches synchronously retransmitting a data packet **[Col. 10, lines 27-39]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a UMTS system and HARQ protocol so that multi-media capabilities can be provided and to synchronously retransmit packets so that maximum data throughput can be achieved **[Col. 10, lines 27-39]**.

Regarding claim 40, Hwang teaches a receiver operable to receive a data packet from the mobile station **[Fig. 2, 111]**, a determining unit operable to determine whether the data packet has been successfully decoded **[Fig. 2, 120]**, a transmitter operable to transmit a feedback message to the mobile station **[Fig. 2, 126]**, if it has been determined that the data packet has not been successfully decoded **[Fig. 2, 126]**, wherein the feedback message indicates to the mobile station to transmit a retransmission data packet for the received data packet after a predetermined time span upon having received the feedback message **[Page 6, Para 75]**.

However, Hwang does not teach a scheduler operable to schedule data transmissions of a plurality of mobile stations by transmitting a common control message to the plurality of mobile stations wherein the common control message restricts the transmission format combination subset of each of the plurality of mobile stations to determine a maximum uplink resource common to the plurality of mobile stations.

Hwang teaches in the background of the related art a UMTS system and using HARQ protocol **[Page 1, Para 2, 16]**. Padovani teaches scheduling uplink data transmissions of a plurality of mobile stations by transmitting a common control message to the plurality of mobile stations wherein the common control message restricts the transmission format combination subset of each of the plurality of mobile stations to determine a maximum uplink resource common to the plurality of mobile stations **[Col. 20, lines 44-67, Col. 21, lines 23-31, signal to interference ratio determines the maximum uplink data rate]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a UMTS system and HARQ protocol so that multi-media capabilities can be provided and to determine maximum uplink resource for the plurality of base stations since

signal to interference ratio varies in the system which affects amongst other things data rate **[Col. 20, lines 44-67]**.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrahas Patel whose telephone number is (571)270-1211. The examiner can normally be reached on Monday through Thursday 7:30 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2616

/Chandrahas Patel/
Examiner, Art Unit 2616